Sustainable Design Interventions for Appliqué Crafts of Uttar Pradesh, India

Synopsis

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"Ethical and sustainable fashion is not a product. It's a practice. Everyone is invited to participate. And you can get started right now. Today." – *Elizabeth L. Cline*

1.1 Traditional Art and Craft forms of India

Crafts are human expressions; they serve as a language to express ideas. They are an indigenous creation of the common population in rural areas and small towns. The lives of the town and the people themselves are deeply entwined in this work. The dominant culture of the region greatly affects and influences these crafts works. But there is a tradition associated with these crafts that has endured for many generations. UNESCO defines craft produce as, "Artisanal Products which are brought to being by craftsmen, manually or otherwise, while retaining the fine imprints of unique personal touches". As a result, the term "handicraft" generally refers to objects created for aesthetic, spiritual, or practical reasons. Like its traditions and ethnicities, the Indian craft is distinctive, abundant, and diversified. Indian culture and ethos place a high value on crafts. Each section of the country has its own distinct cultural ethos, which may be seen in the local handicrafts (Jung et al., 2015).

Textiles represent a very significant share of Indian arts and crafts. The diverse and rich artistic and cultural heritage of the Indian subcontinent is well known around the world. Indian textiles come in a wide range of weaves, embroidery, printing, and other styles. They span the gamut from Saudagiris to Kalamkaris, Phulkaris to Kanthas, Kanchipurams to Benarasis. The majority of the textiles have endured to this day, weaving through historical alleyways. In the past, they have received sustenance from the Delhi Sultanate, the Great Mughal Empire, Nawabs and Rajas, as well as European powers like the Portuguese, French, and British. Appliqué is a textile craft that survives till today, not enjoying any royal patronage, but as an essential part to daily existence.

1.2 Appliqué craft of India

Appliqué craft is a decorative technique in which a backdrop fabric is stitched with fabric pieces of various shapes and colours to serve functionality or decoration. Appliqué is frequently created from old or discarded scraps of material, which can provide vibrancy and beauty. It can take any form, including figurative, ornamental, and geometric.

The word is derived from the French word "appliquér," which means "to apply" or "to apply something." In its broadest sense, an appliqué is any little ornament or object fastened to another surface.

1.2.1 Types of Appliqués

Traditional appliqué comes in a variety of forms and can be found all over India. In India the states of Gujarat, Rajasthan, Uttar Pradesh, Bihar, Odisha, and Tamil Nadu all have significant appliqué craft traditions. Each has a distinct format, colour scheme and range of motifs, with varying degrees of stylisation and sophistication - Rabari, Kathi, Mochi, and Muslim Appliqué from Gujarat; Mahajan from Saurashtra; Satwara, Marwari and Meghwal from Rajasthan; Tharu from Uttar Pradesh; Khatwa from Bihar; Pipli from Odisha; and Tanjore from Tamil Nadu. (Ruchira Ghosh, 2017)

A snapshot of these traditional Appliqué crafts are presented in the table below -

Table 1: Appliqué work of different states of India at a glance (Source: Asian J. Home Sci., 14(1) June, 2019)

S.No	State	Specific Name	Raw Material Used	Motifs applied	Colour used	Craft items
1.	Rajasthan	Gotta Patti	**Traditional:** Pure Georgette, Chiffon, Velvet and Silk **Contemporary:** Semi-pure fabrics, Tussar silk, Crepe, Khadi, Cotton	Birds, human figure, animals, floral and geometrical designs	Metallic Golden, Silver and Copper etc.	**Traditional:** Ghagras, Odhani and Sarees **Contemporary:** Jackets, Kurties, Blouses and Bags
2.	Orissa	Pipli Appliqué	**Traditional:** Velvet and Khaddar **Contemporary:** Mill cotton, Salu and Markin etc.	Geometric, abstract and stylized inspired from flora, fauna and mythology	Red, Black, White, Yellow and Green etc.	**Traditional:** Chandua, Chatti,Tarasa, Alata, Dola Mandani, Tilaka Kothali, Bairakha Bachkan and Batua **Contemporary:** Garden umbrellas, Saris, Blouse
3.	Bihar	Khatwa	**Traditional:** Thick weaved cotton, Cotton variations and cotton **Contemporary:** Tussar silk, Matka silk and Pure silk	Geometrical, flowers, birds and trees	Orange, Red, Yellow rtc.	**Traditional:** Shamianas, Chandawa, Tamboo and Qanats **Contemporary:** Cushion covers, Curtains, table clothes, Blouse piece and Sarees Borders
4.	Gujarat	Katab	**Traditional:** Badhani, patola brocades, Satins and Printed cottons	Both animal motifs- peacock, elephants, horse etc. and floral motifs	Bold and Bright shades	**Traditional: Toran, Chaklas and Chanderawas Contemporary: Cushion covers and Bolsters**

5.	Uttar Pradesh	Pattiwork	**Traditional:** Organdy, Voile and Cotton **Contemporary:** Tissue, Net, Organza and Synthetic	Floral motifs only	White, Pales and Contrast etc.	**Traditional:** Dupattas and Sarees **Contemporary:** Dress material, Kurtas, Tops and Bedcovers

1.3 Appliqué Embroidery of Uttar Pradesh

The "Heartland of India," also known as Uttar Pradesh (U.P.), is praised for its Chikankari, or white-on-white embroidery, and Zari or Zardozi, or gold-on-silver embroidery, produced in Varanasi, Agra, Bareilly, and Lucknow. Appliqués are reportedly another type of traditional craft in this area. (Rashmi, 2016)

Appliqué of Uttar Pradesh consist of three types:

1. **Appliqué, Tharu, Uttar Pradesh**

The women of the Tharu tribe (Terai village) create the vibrant Tharu Appliqué patterns. Their traditional clothing is embellished with this beautiful art. Men's caps, jackets, and pouches are among the traditional pieces, along with ghagra cholis. Brightly coloured fabrics are manufactured with rectangular and geometric patterns that include triangles, tiny lines, and colourful beads. (Rashmi, 2016)

2. **Appliqué, Rampur, Uttar Pradesh**

Along with Patch Work and Zari Patchwork, appliqué work is a one distinctive crafts of Rampur, Uttar Pradesh. Its unique features include techniques that create an art work using small pieces of fabrics.

3. **Patti Ka Kaam, Aligarh, Uttar Pradesh**

Aligarh is the major location for this traditional embroidery cum applique technique known as Patti ka Kaam. Pattiwork is historically appliqué-style needlework done on fine white cotton fabric, with stiff fabric used to simulate threads for the stitched appearance. Similar to other appliqué styles, it was created primarily by Muslims women and was influenced by the Mughals. (Khan, 2019).

1.3.1 Present status and Need for revival for Appliqués of Uttar Pradesh

Despite the demands of industrial mass production and antagonisms from different countries, the beauty of handmade textiles from India has its own endurance. However, in the face of demand for modernization, the number of handmade textiles seems to be rapidly declining. They just cannot compete with industrial competitors due to the tedious process that goes into their development, which

can take months or even years from conception to implementation. As a result, their existence is getting depleted, many crafts being gravely threatened, and some being lost forever. In this context, it is imperative that handmade textiles be evaluated and accurately mapped in all of their richness. Protecting traditional culture and knowledge is therefore vital in order to preserve local communities' sense of identity (Sethi, 2005, 2021).

The Appliqué craft of Uttar Pradesh has not been known by most of the people all over India. In order to promote and explore more about this lesser-known but not infamous craft, there is a need to raise awareness about it. The aim of the present study is to gain insight into this craft and to determine how it differs and stands out from the appliqué work produced in other Indian states. This study will also help in promoting and reviving the appliqué craft of Uttar Pradesh amongst the researchers, producers, designers, and consumers. Through intervention programmes, the current study also aims to assure the sustainability of the craft.

1.4 Design Intervention for Craft Sustainability

Craft complies with sustainability's guiding principles in terms of localisation, eco-efficiency, resilient systems, and contextualised lifestyles. Even yet, there are inconsistencies and tensions between sustainability and workmanship that need to be addressed. Design has the capacity to change the world because it can offer significant solutions to challenges involving multiple disciplines (Irwin, 2015). Over the past 20 years, a variety of approaches have made it possible for solutions and projects to emerge in the subject of design for sustainability. These include upcycling, systemic design, green design, cradle-to-cradle, biomimicry, product/service-based systems, and social innovation. The practices and discourses of design for sustainability have yielded an unprecedented mix of ideas and approaches.

1.5 Need and Justification of the study

The numerous and various textile crafts practised in India are a part of the country's cultural fabric and are examples of living traditions. Every generation has added to this rich tradition, which exhibits a wide variety of aesthetics, technical skills, and design vocabularies. These crafts are passed down from one generation to the next, renewing and evolving as they are reinterpreted for every age. As a result, they stay relevant, lively, and sustainable in the face of shifting social conditions.

Due to globalisation, consumers are less aware of the value of crafts. Domestically, the complete mismatch between supply and demand was caused by a gap between producers and consumers. The gap can be bridged with the help of designers, design organisations, and government development organisations. Craft is a method of manufacturing that allows for the manifestation of culturally meaningful designs, products, and practises. Since the connection between craft and sustainability has been extensively studied in recent years, there is a need for a global resurgence of interest in traditional craft methods. (Jung et al., 2015).

A review of the literature on earlier studies on Indian traditional textiles and their current status revealed a pressing need to revive awareness of traditional art forms and their existence due to factors like the cluster's financial situation, a lack of time, the general public's disinterest in Indian artwork and handicrafts, and the emergence of social media (Kumar D.2018). In specific, few literature has been reviewed on existence and its revival of appliqué craft of Uttar Pradesh. Additionally, the impending trend of localization over globalisation indicates enormous potential for its revival. As a result, the researcher is motivated to develop a strategy for an in-depth investigation into Uttar Pradesh's appliqués as well as to learn about their present status. A design intervention to ensure the sustainability of the Appliqué crafts of Uttar Pradesh will be undertaken with appropriate strategies for to broad investigation and revival of Appliqué crafts of Uttar Pradesh.

1.6 Statement of the problem

Based on the above lines, the following statement of problem is proposed-

Sustainable Design Intervention for Appliqué Crafts of Uttar Pradesh, India

1.7 Objectives of the Research

1. To document the traditional Appliqué craft of Uttar Pradesh with respect to its origin, history, techniques, materials, colours, designs and motifs used.
2. To assess the existing status of Appliqué craft of Uttar Pradesh.
3. To devise Sustainable Design Intervention strategies for Appliqué craft of Uttar Pradesh.
4. To induce capacity building support to revive the Appliqué craft through dissemination of knowledge and awareness generation.

5. To assess the acceptability and marketability of the developed Appliqué craft products using sustainable materials and techniques.

1.8 Operational Definitions

- **Craft -** A craft or trade is a leisure or profession that calls for specific abilities and expertise in specialised work. In a historical context, notably the Middle Ages and earlier, the term is typically used to refer to individuals involved in the upkeep or small-scale production of items.
- **Sustainability -** The definition of sustainability is "meeting the requirements of the present without compromising the needs of the future" and "ensuring a balance between economic growth, environmental protection, and social well-being."
- **Design- Design** means to to create, fashion, execute, or construct according to plan**.** A design is a plan or specification for the creation of a system, object, activity, or process, with output of that plan or specification in the form of a prototype, finished goods, or method.
- **Intervention –** A situation in which someone becomes involved in a particular issue, problem etc in order to influence what happens.
- **Appliqué -** Appliqué is a sewing technique in which fabric patches are laid on a foundation cloth and then stitched in place, with the raw edges turned under or concealed by ornamental stitching, either by hand or by machine.

1.9 De-limitations

- The study will be limited to three Appliqué craft clusters of Uttar Pradesh in India.
- The study will be limited to creating 90 CAD patterns only.
- The study will be limited to designing of 30 apparels/products only.

2.0 Review of Literature

A literature review is a systematic explicit and reproductive method for evaluating and identifying the existing body of recorded work produced by the researcher, the scholars, and the practitioners. The objective of literature review is to identify the “gap in the area, further research is carried out to fill this gap. An ideal literature review goes beyond the stage of simply listing the source. It conducts

an analytical study on the chosen area through which the researcher can develop the positioning, analysis and argument.

2.1 Studies on Indian art and craft

Hussain A. (2016) discussed as a case study on the weavers of Mau (Uttar Pradesh) highlighting the need to protect and promote traditional crafts and occupations in a globalising India. The paper inferred that craft exists in various civilizations and centuries at one time. The distinctions between cultures are blurring and losing significance. Whether Indian handicrafts can compete with massive industrial products is the industry's main worry.

Chandra S. (2015) stated that Kalamkari is a term for pen paintings. It is a beautiful type of textile with a long history. The phrase first appeared when Persian and Indian commerce merchants joined forces, referring to all Indian painted textile art from India as Kalamkari. The Persian term for pen is "Kalam," and the Urdu word "Kari" alludes to the level of skill.

Jain R., Tiwari A. (2012) discussed that tie-and-dye crafts are referred to as bandhani. A little piece of fabric is tied by a tread to create a variety of designs, which are then dyed by dipping it in dye and repeating the process for a variety of colours. Following this, the fabric is dried, and once it has dried, the threads are reopened so that the design can be seen.

2.2 Studies on Appliqué work

Khan S., Naseem S. (2019) discussed about a distinctive Appliqué skill from Aligarh, Uttar Pradesh, is pattiwork. The majority of people in India do not have any knowledge of pattiwork. Thus, it has been recognised that there is a need to spread greater knowledge about this less well-known but not infamous art of Aligarh, Uttar Pradesh. The goal of the current study is to get insight into the Pattiwork appliqué technique and to determine how distinctive and exceptional it is from the appliqué work produced in other Indian states.

Samall B. (2015) wrote about Orissa, India's Appliqué Craft: Continuity, Change, and Commercialization, highlighting its present status, its product diversification and acceptability. The paper also discussed the need for efforts to sustain the appliques of Orrisa times to come.

According to the findings of **Mohanty (2005)** some artisans who were involved in the appliqué skill were relocated from Pipili to Puri. Jagannath It is not unexpected that even a piece of hand-

embroidered fabric is present among the paraphernalia of Lord Jagannath, the reigning deity of Puri, given how rich the culture is in rites and traditions.

2.3 Sustainability of craft

Wanlin Z.(2022) aims to determine the relationship of traditional craft practices to sustainability in the Chinese context, to investigate and delineate the role of design in relation to Chinese craft revival activities, to identify sustainability-related issues, and to identify areas in which design can contribute to the long-term continuation of traditional craft practices. It draws upon the fields of craft and sustainability studies to provide a theoretical base for the research.

Bajpai S., Karolia A.(2015) conducted a research on "Prospects for the Sustainability of UP's Chowkpurana and Brocade Crafts." The study made an effort to give the Chowkpurana floor art, which was on the point of extinction owing to modernity, a solid foundation. The investigator noted that Chowkpurana floor art and brocade craft are still practised in Uttar Pradesh today, with both genders providing the motivation to do so.

Sulekha O., Kashyap R. (2015) did a detailed study on sustainability of metal embroidery industry of Rajasthan. They took an initiative for conservation of cultural heritage by documenting the traditional motifs and tools and techniques of metal embroidery of Rajasthan. They also aims to study socio-economic profile of the artisans and contemporising the motifs of metal embroidery of Rajasthan and to develop a product according to the market trend. To keep pace with the changing trends of the consumer taste and fashion, motifs of metal embroidery were stylized through computer aided designing.

2.4 Documentation of Traditional Indian Textiles

Khan S., Sahar N. (2019) discussed that Pattiwork is historically appliqué-style needlework done on fine white cotton fabric, with stiff fabric used to simulate threads for the stitched appearance. For more than 60 years, the craft Historical Overview of Kutch Embroideries.

Chowdhury (2012) conducted a study on early 19th to late 20th century, on Nakshi Kantha from West Bengal, a traditional needlecraft. Nakshi Kantha is a colourful quilt that serves as a canvas for artists to express themselves and to share their morals and views.

Gupta (2012) conducted a research into textile arts and their role in Indian fashion. Leading design schools and studios are bringing back ancient crafts that were dying out and are a significant part of modern Indian fashion. In Auroville, Tamil Nadu, India, Uma Haimavati (formerly Prajapati) established the Upasana design studio in 1997. (www.upasana.in).

Study of **Kaur P. (2011)** revealed that "by the 20th Century, the Phulkari cluster had become a lost art and was in danger of extinction. The objects' quality has declined, and this craft form has turned into a parody of itself. The demise of this traditional craft can be attributed to a number of issues, including lack of skill, middlemen's exploitation of the craftspeople, and physical and communicational barriers to contact.

2.5 Revival of Indian Traditional Indian Textiles

Gaur S., Bhaghat S. (2022) studied on the revival of mendh printing craft of Rajasthan. They had made an effort to initiate the process of reviving the languishing craft of Mendh printing of Rajasthan. Concerning from the preservation of knowledge through craft documentation, knowledge generation by standardization of the printing process and identification of care techniques for aged mendh printed textiles, knowledge management by preparing IEC materials and knowledge dissemination through awareness and training workshops.

Gupta S., Adhikari S. (2018) conducted a study on the modification of Bihar's Sujani Embroidery's Designs and Technique for Revival. The study was conducted to resurrect Sujani, the traditional art form of Bihar. Through reinterpretations, retranslations, and adaptations, traditional designs have the potential to inspire limitless innovations. Using CAD, the conventional sample themes were then organised and transformed into their stylized shapes.

Gupta A., Mehta S.(2013) studies the effect of colonization and globalization in the shaping of Phulkari. Also mentioned that Hand woven fabrics and embroidery are known to be some of the most ancient form of handicraft nurtured in almost every corner of Indian subcontinent. Embroidery is often an expression of the maker especially women depicting their emotions on fabric and their lived histories. Usefulness of this form of decoration is reflected in the fabrics used in clothing for humans as well as domesticated animals, household articles and decorations in temples.

2.6 Digitization of Traditional Art and Craft

Aljaberi S., Ogaili A. (2022) did an investigation on integration of cultural digital form and material carrier form of traditional handicraft intangible cultural heritage. Intangible cultural heritage is the continuous progress of human society. Intangible cultural heritage is a human-oriented living cultural heritage. It emphasizes human-centric skills, experience, and spirit, and is characterized by living changes. What stands out is the intangible attribute, and more emphasis on the quality that does not depend on the material form.

Sharma G., Bhagat S. (2018); a paper was presented on the Toda, a long-extinct pastoral people in Tamil Nadu, India, who reside in the chilly uplands of the Nilgiri Mountains. With a focus on documenting, raising public awareness, and enhancing the skills of the artisans, the current study aims to conserve and restore this craft. Interventions for the resuscitation and protection of this traditional craft and community were proposed.

Sharma E. (2016) discussed on the digitalization of motifs based on Indian folk paintings through CAD and their adaptation on apparels using digital printing technique. She also wrote that India had always been known as the land that portrayed cultural and traditional vibrancy through its conventional arts and crafts. Traditionally these paintings were done by hand, now these designs can be created directly with the help of CAD and applied on textiles through Digital Printing. The present study was an attempt to develop fusion designs from these two folk paintings using CAD and adapt them on apparels using digital printing.

Manek (2012) made an attempt to document, digitize and analyse the rich textile artefacts of selected individuals of Gujarat with focus on preservation and conservation. Intensive efforts were made to develop a digital database for greater access as well as workshops were organized to raise awareness about preventive conservation amongst textile possessors at house hold level. The preservation and conservation practices revealed that preventive conservation can be practiced with the limited available resources by all, be it a museum or personal textile collector.

2.7 Design Intervention

Tiwari S., Dhakad D. (2022) proposed the design intervention & craft revival with reference to pichwai paintings. The purpose of their study was to ensure if design intervention helps in the revival of dying craft with

interesting ideas with new intervention models and create new range of products.

Thangavelu P. (2017) discussed about the design intervention of the sustainability of handloom craft. Also putt on effort for analysing the need of Design Intervention of the sustainability of the Handloom textiles and to bridge the gap between the handloom weavers and the consumers. Few findings that were related to the challenges are, adapting to rapid change and the need of innovation and improvisation of the existing product of the craft. Innovative marketing strategies using GI indication of Branding, Packaging and positioning the product in the urban market to enhance the visibility of the Craft, would not only attract global clients but also support the artisan.

Kumari P., Karolia A. (2013) discussed that India has been a reservoir of diverse art and craft where handloom textile forms a major part of it. Its credit goes to the artisans who work with hardship to realize it. At present survival of many handloom textiles is of major concern due to several issues especially its inefficiency to meet the consumer's preference. Present study was conducted to intervene with Mashru a traditional handloom craft of Gujarat. This craft is known for its multicolored stripes and decisive weave structure.

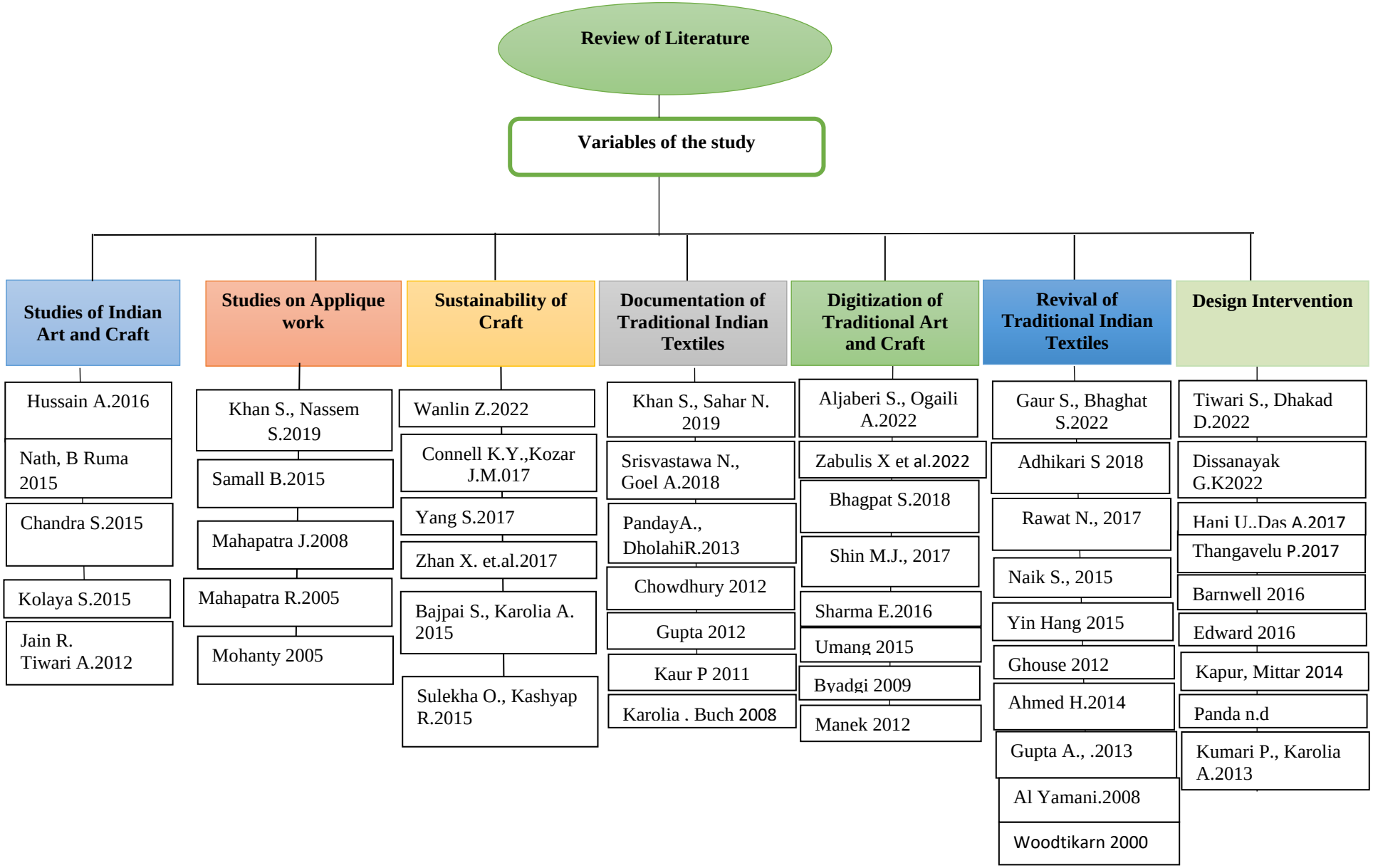

Figure 1: Classification of literature review as per variables of study

3.0 Methodology

A methodological analysis of the study problem is methodical and rational. It is a science that investigates issues in order to implement scientific answers. A plan of action, or research design, must be created as a blueprint for each research project. According to Liehr & Smith (2003), the investigator comprehends strategies and considers the best practise that might be applicable to the particular issue. This section will emphasise the steps that the researcher will take to accomplish the study's goals.

The present research will be carried out to study and explore the possibility of Sustainable Design Interventions for Appliqué Crafts of Uttar Pradesh. The present study will be a Mixed-methods research design. The various methods of research and tools for collection of data will be selected as per the nature of the research, and its objectives.

For documentation of Applique craft of Uttar Pradesh, its origin and history, production process, motif symbolic meaning and visual description, descriptive study will be used. The exploratory study will be used to assess the existing situation of the craft in Applique clusters of Tharu, Rampur and Aligarh in Uttar Pradesh. Experimental method will be used for creating new designs and sustainable product development. The data will be collected using various tools like case study, questionnaire, observation, photography and videography.

3.1 Phases of Research

In this section the methodological approach followed to attain specific objectives of the study has will be discussed in three phases as mentioned below:

- ***Phase I:***

  Pre- Intervention Phase

- ***Phase II:***

  Experimental Phase

- ***Phase III:***

  Experimental Phase

- ***Phase IV:***

  Post- Intervention Phase

3.2 Phase I: Pre- Intervention/ Exploratory Phase

3.2.1 Documentation of Traditional Appliqué craft of Uttar Pradesh

- The first phase of the study will include ethnographic field and desk research through primary and secondary data collection in the region of study. The major thrust during this phase will be to document the three different traditional Appliqué crafts of Uttar Pradesh, viz.
    - Eastern Uttar Pradesh – Tharu tribe
    - North-western Uttar Pradesh – Rampur
    - Western Uttar Pradesh – Aligarh

3.2.2 To asses and explore the present status of the Applique craft of Uttar Pradesh

- To analyse the present status of the craft, 5 artisans of each of these 3 clusters will be selected by snow ball sampling technique. A structured interview schedule will be developed with the questions related to their craft, income level, profit, investment, and problem faced about the craft, adaptability to the diversification and so on.
- Additionally, 5 Traders / NGO's associated with the artisans from each of these 3 clusters will be selected, and questions related to sourcing, marketability, present status and need and areas for design intervention will be identified.

3.3 Phase II: Experimental Phase (Part I)

In this phase the traditional applique motifs/patterns would be contemporized to create new versions of designs and later create innovative apparels/products utilizing the created CAD patterns.

3.3.1 Revival of Appliqué craft - CAD Pattern Development

For CAD Design development following steps will be taken:

Collection of Designs: To begin, designs will be collected from various museums, books, and personal collections of artisans and other secondary sources of data collection.

Development of Contemporary Designs:

Total of 90 contemporary motifs (30 inspired from each cluster) will be developed.

3.4 Phase III: Experimental Phase (Part II)

3.4.1 Product Development- Sustainability Design Intervention

Design Intervention will be taken up for the revival and preservation of this traditional craft and community. Detailed propositions for using design methods and strategies to intervene in the sustainable development of Appliqué crafts of Uttar Pradesh crafts is proposed at multiple levels –

- **Production level:** At production level, the making process could be supplemented through improvement in the techniques of Appliqué crafts.
- **Product level:** The next part of this phase includes the development of sustainable apparel designs collection along with new product development to meet the goals for consumer appeal.
    - A documentary will be created of the developed sustainable products and will be floated on self-created website and social media sited through vlogs.

3.5 Phase IV: Post-Intervention Phase

The process of research is incomplete if the exploration and experimentation techniques carried out for process design process does not reach its stake holders. Therefore, this last phase deals with the dissemination of information to artisans, traders Ngo's and the consumers.

3.5.1 Dissemination of Information and Awareness Generation of the Appliqué craft

The Design intervention component of Promotion and Market level will be covered in this phase.

- **Promotion and Marketing level:** The sustainable design intervention at promotion and market level would be incorporated by:
    - Promotion of Appliqué apparel designing documentary through various social media, website/blogs
    - Revisiting the Artisans/ Traders / NGOs
    - Acceptability and marketability of the developed Appliqué craft products will be assessed.

3.7 Development of research tools & Statistical analysis

For investigation of the various phases of the study, following tools will be developed.

- Structured Interview for Artisans (along with case study and group discussions)
- Unstructured Interview schedule for Traders/ NGOs's associated with the craft
- Rating/Ranking scale for developed CAD patterns and catalogue of the craft.
- Rating scale to evaluate the developed products from the applique craft of Uttar Pradesh

- Rating scale to evaluate the effectiveness of the documentary created for awareness and promotion.

The information collected through research tools will be analyzed and interpreted with the help of various statistical techniques. It will be used according to type and requirement of data obtained. The statistical tools like percentages, averages and rating scales will be used to analyse the results of the study.

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